Dimeria mahendragiriensis - A new species of Poaceae from Orissa, India

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Abstract

A new species of Dimeria R. Br. viz., D. mahendragiriensis, is described and illustrated.

The tropical and subtropical genus *Dimeria* R. Br., of nearly 49 species, has so far been represented in India by 32 species (Sreekumar & Nair, 1991; Ravi & Anilkumar, 1992; Ravi, 1995) of which 10 are known to occur in Orissa (Bor, 1952).

The junior authors collected specimens of a species of *Dimeria* R. Br. from Mahendragiri in the Ganjam Dist. of Orissa way back in 1979. Critical study of the specimens revealed them to be distinct from the hither-to known Indian species of the genus. Subsequent studies with the help of Dr. Thomas A. Cope of Royal Botanic Gardens, Kew, confirmed them as of a new species of *Dimeria*. The new taxon is named, described and illustrated here.

Dimeria mahendragiriensis Ravi, Saxena et Brahmam sp. nov. (Fig. 1)

D. lehmanii (Nees) Hack. affinis sed differt racemis solitariis, gluma inferiore omnino carinata et in dimidio superius anguste alata, gluma superiore cum ala papyracea versus apicem, deorsumque suberosa, arista breviore.

Type: India, Orissa, Ganjam Dist., Mahendragiri 22, November 1979. Saxena et Brahmam 3880 (Holo – R R L Herbarium, Bhubaneswar; Iso – T B G T).

D. mahendragiriensis is allied to D. lehmanii (Nees) Hack. but distinct in having solitary racemes, lower glume keeled all along the back and narrowly winged towards the tip, wing of the upper glume papery towards the tip and corky below and shorter awn.

Perennial herb. Culms slender and branched, lower portion subterranean and rooting at nodes; nodes ciliate. Leaves all along the culm; sheath up to 6 cm long, lower ones longer

A new species of Dimeria from Orissa

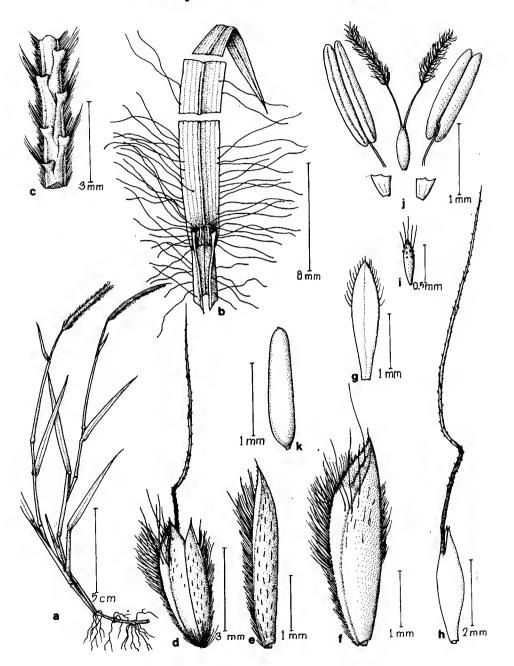


Fig. 1. Dimeria mahendragiriensis Ravi, Saxena et Brahmam. a. Habit; b. Leaf; c. Rachis; d. Spikelet; e. Lower glume; f. Upper glume; g. Lower lemma; h. Upper Lemma;

i. Upper palea; j. Lodicules, Stamens & Pistil; k. Grain

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than the internodes and slipping from the culm, keeled on the back, hyaline on the margins, sparsely ciliate with bulbous-based hairs to glabrous; blade linear-lanceolate to elliptic, acuminate at apex, up to 10 cm x 4 mm, more or less rounded at base, flattened on the mid-rib above and keeled below, ciliate with bulbous-based hairs towards the base, prominently so on the margins and towards the margins on the upper surface and scaberulous on the margins towards the tip; ligule membraneous, truncate at apex, 1-1.5 mm long. Raceme solitary; rachis triquetrous, flattened on the back, c 0.75 mm wide, prominently winged on the margins, wings ciliate and prominently ridged on the face; pedicels c 0.5 mm long, concave at apex, thickly ciliate on the outside and sparsely so on the inside. Spikelets elliptic in profile, 4-5 mm long; callus c 0.5 mm long, callus hairs up to 0.75 mm long. Lower glume oblong-elliptic, acute-aristate at apex, 3-3.5 x 0.5-0.6 mm (when folded), strongly keeled on the back, keel narrowly winged in the upper half, ciliate on the keel except towards the scaberulous apex, and sparsely shortciliate on the sides. Upper glume subcoriaceous, oblong-elliptic, acute-aristate at apex, 4-4.5 x 1 (1.2) mm (when folded), broadly winged on the keel; wing narrowed to the base, papery towards the apex and corky below, densely ciliate on the back except towards the scaberulous apex with a few longer hairs on the sides in the upper half; sides subcoriaceous, sparsely ciliate; margins hyaline, shortly ciliate in the middle. Lower lemma oblanceolate, acute at apex, cuneate at base, hyaline, 2-2.5 mm long, sparsely ciliate on the margins in the upper half. Upper lemma elliptic, bifid at apex with acute lobes, 2.5-3 x 0.5 mm (when folded), awned from the sinus; awn up to 10 mm long with a 3 mm long column. Lodicules 2, cuneate at base. Palea linear-elliptic, c 0.75 mm long, papillate in the upper half and long-ciliate towards the apex. Stamens 2; anthers 1.5 mm long. Ovary c 0.5 mm long; styles 2, 1 mm long; stigmas 2, c 1 mm long. Grains oblong-flattened, acute to subacute at apex, 1.75-2 mm long.

The specific epithet of the new taxon is after its type locality Mahendragiri in Orissa.

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